

Release notes for ENDF/B Development n-090_Th_229
evaluation



April 26, 2017

- **fizcon** Warnings:

1. About 3 eV away from the actual energy of the first excited state, so close enough
MAT=9031, MF= 3, MT= 4 (1): Real level

```
WARNING(S)      IN MAT=9031, MF= 3, MT= 4
ELEVEL= 1.00000E+01 MIGHT BE UNREASONABLE           SEQUENCE NUMBER      1
```

2. About 3 eV away from the actual energy of the first excited state, so close enough
MAT=9031, MF= 3, MT= 51 (1): Real level

```
WARNING(S)      IN MAT=9031, MF= 3, MT= 51
ELEVEL= 1.00000E+01 MIGHT BE UNREASONABLE           SEQUENCE NUMBER      1
```

- **fudge-4.0** Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

```
WARNING: Missing a channel with angular momenta combination L = 0, J = 1.0 and S = 1.0 for "capture"
```

2. Potential scattering hasn't converted, you need more L's!
resonances / resolved (Error # 1): potentialScatteringNotConverged

```
WARNING: Potential scattering hasn't converged by L=0 at E=8.0 eV, xs[0]/xs[0]=100.0% > 0.1%
```

3. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

```
WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.36%
```

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 1 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [nubar]): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 3 (total): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

6. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n + Th229): / Form 'eval': / Component 0 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

7. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n + Th229): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

8. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission]): / Form 'eval': / Component 0 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

9. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 8 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission]): / Form 'eval': / Component 1 (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

10. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 10 (n + (Th229_e1 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (1.217118e-09) is too small

11. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 11 (n + (Th229_e2 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (9.538526e-09) is too small

12. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 12 (n + (Th229_e3 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (7.472610e-10) is too small

13. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 13 (n + (Th229_e4 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (9.806572e-10) is too small

14. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 14 (n + (Th229_e5 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (1.301816e-10) is too small

15. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 15 (n + (Th229_e6 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (3.207501e-09) is too small
```

16. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 16 (n + (Th229_e7 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (8.154544e-10) is too small
```

17. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 18 (n + (Th229_e9 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (3.465461e-09) is too small
```

18. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 19 (n + (Th229_e10 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (1.654877e-09) is too small
```

19. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 20 (n + (Th229_e11 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (1.801391e-09) is too small
```

20. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 21 (n + (Th229_e12 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (2.598082e-09) is too small
```

21. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 24 (n + (Th229_e15 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (4.331813e-09) is too small
```

22. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 25 (n + (Th229_e16 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (2.935579e-10) is too small
```

23. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 26 (n + (Th229_e17 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (5.269265e-09) is too small
```

24. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 27 ($n + (Th229_e18 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (4.309224e-09) is too small

25. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 28 ($n + (Th229_e19 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (2.756455e-09) is too small

26. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 29 ($n + (Th229_e20 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (3.731174e-09) is too small

27. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 30 ($n + (Th229_e21 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (6.197631e-10) is too small

28. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 31 ($n + (Th229_e22 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (2.605700e-11) is too small

29. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 32 ($n + (Th229_e23 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (6.778826e-09) is too small

30. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 33 ($n + (Th229_e24 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (9.685688e-10) is too small

31. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 34 ($n + (Th229_e25 \rightarrow Th229 + \gamma)$): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (3.818233e-10) is too small

32. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 35 (n + (Th229_e26 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.
- ```
WARNING: Ratio of smallest/largest eigenvalue (2.983069e-09) is too small
```
33. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 36 (n + (Th229\_e27 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.*
- ```
WARNING: Ratio of smallest/largest eigenvalue (5.933681e-09) is too small
```
34. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 37 (n + (Th229_e28 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.
- ```
WARNING: Ratio of smallest/largest eigenvalue (2.150486e-09) is too small
```
35. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 38 (n + (Th229\_e29 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.*
- ```
WARNING: Ratio of smallest/largest eigenvalue (1.152150e-09) is too small
```
36. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 39 (n + (Th229_e30 -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.
- ```
WARNING: Ratio of smallest/largest eigenvalue (6.429902e-09) is too small
```
37. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 40 (n + (Th229\_c -> Th229 + gamma)): / Form 'eval': (Error # 0): Condition num.*
- ```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```
38. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 41 (Th230 + gamma): / Form 'eval': / Component 0 (Error # 0): Condition num.
- ```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```
39. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.  
*Section 41 (Th230 + gamma): / Form 'eval': / Component 1 (Error # 0): Condition num.*
- ```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```

40. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 42 (n + Th229 [angular distribution]): / Form 'eval': (Error # 1): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

41. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 43 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

42. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 44 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

43. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 45 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

44. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.

Section 46 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission] [spectrum]): / Form 'eval': (Error # 0): Condition num.

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

- **fudge-4.0 Errors:**

1. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c ->Th229 + gamma) / Product: Th229_c / Decay product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (120000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

2. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c ->Th229 + gamma) / Product: Th229_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (120000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

WARNING: Domain doesn't match the cross section domain: (187824.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

WARNING: Domain doesn't match the cross section domain: (125962.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

... plus 75 more instances of this message

3. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (187824.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
4. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (125962.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
5. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
6. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (140000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
7. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
8. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
9. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
10. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (146994.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
11. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (170000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

12. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

13. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (235834.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

14. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

15. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

16. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

17. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

18. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

19. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

20. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (174364.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

21. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (242664.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

22. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

23. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

24. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

25. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (235834.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

26. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

27. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_z / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

28. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_aa / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

29. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ab / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

30. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ac / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (235834.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

31. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ad / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (200000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

32. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ae / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

33. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_af / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

34. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ag / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

35. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ah / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

36. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ai / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

37. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_aj / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

38. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ak / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

39. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_al / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

40. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_am / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

41. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_an / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

42. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ao / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (235834.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

43. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ap / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (304224.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

44. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_aq / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

45. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ar / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

46. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_as / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

47. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_at / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

48. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_au / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

49. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_av / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

50. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_aw / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (250000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

51. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ax / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (300000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

52. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ay / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

53. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_az / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

54. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ba / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (289188.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

55. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bb / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

56. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bc / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

57. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bd / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
58. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_be / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
59. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bf / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
60. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bg / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
61. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bh / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
62. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bi / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
63. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bj / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
64. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bk / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
65. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bl / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (318567.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

66. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bm / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

67. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bn / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

68. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bo / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

69. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bp / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

70. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bq / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

71. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_br / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

72. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bs / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

73. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bt / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (400000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

74. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bu / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)

75. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bv / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
76. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bw / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
77. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bx / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
78. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_by / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
79. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_bz / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
80. Energy range of data set does not match cross section range
reaction label 31: n + (Th229_c -> Th229 + gamma) / Product: Th229_c / Decay product: gamma_ca / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (500000.0 -> 20000000.0) vs (110971.0 -> 20000000.0)
81. Calculated and tabulated Q values disagree.
reaction label 32: n[multiplicity:'2'] + Th228 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: -5510360.298950195 eV vs -5256990. eV!
82. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
83. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (5500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

84. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

85. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

86. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

87. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

88. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

89. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

90. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

91. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

92. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

93. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

94. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

95. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

96. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

97. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

98. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

99. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

100. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

101. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

102. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
103. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
104. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
105. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
106. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
107. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
108. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
109. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
110. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

111. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
112. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
113. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
114. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
115. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
116. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
117. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
118. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
119. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

120. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
121. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
122. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
123. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
124. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
125. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
126. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
127. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
128. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

129. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
130. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
131. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
132. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_z / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
133. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_z / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
134. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aa / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
135. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aa / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
136. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ab / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
137. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ab / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

138. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ac / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
139. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ac / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
140. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ad / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
141. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ad / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
142. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ae / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
143. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ae / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
144. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_af / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
145. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_af / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
146. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ag / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

147. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ag / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
148. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ah / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
149. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ah / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
150. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ai / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
151. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ai / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
152. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aj / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
153. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
154. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ak / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
155. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ak / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

156. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_al / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
157. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_al / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
158. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_am / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
159. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_am / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
160. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_an / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
161. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_an / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
162. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ao / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
163. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ao / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
164. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ap / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

165. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ap / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
166. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aq / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
167. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
168. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ar / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
169. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ar / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
170. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_as / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
171. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_as / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
172. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_at / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
173. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_at / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

174. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_au / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
175. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_au / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
176. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_av / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
177. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_av / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
178. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aw / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
179. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_aw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
180. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ax / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
181. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ax / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
182. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ay / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

183. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ay / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
184. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_az / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
185. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_az / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
186. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ba / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
187. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ba / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
188. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bb / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
189. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bb / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
190. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bc / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
191. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bc / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

192. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bd / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
193. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bd / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
194. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_be / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
195. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_be / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
196. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bf / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
197. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bf / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
198. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bg / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
199. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bg / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
200. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bh / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

201. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bh / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
202. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bi / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
203. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bi / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
204. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bj / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
205. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bj / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
206. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bk / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
207. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bk / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
208. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bl / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
209. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bl / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

210. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bm / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
211. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bm / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
212. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bn / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
213. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bn / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
214. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bo / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
215. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bo / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
216. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bp / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
217. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bp / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
218. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bq / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

219. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bq / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
220. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_br / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
221. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_br / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
222. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bs / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
223. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bs / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
224. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bt / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
225. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bt / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
226. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bu / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
227. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bu / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (6500000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

228. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bv / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
229. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bv / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
230. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bw / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
231. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bw / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
232. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bx / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
233. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bx / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
234. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_by / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
235. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_by / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
236. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bz / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)

237. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_bz / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
238. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ca / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
239. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_ca / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
240. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_cb / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
241. Energy range of data set does not match cross section range
reaction label 32: n[multiplicity:'2'] + Th228 + gamma / Product: gamma_cb / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (7000000.0 -> 20000000.0) vs (5280140.0 -> 20000000.0)
242. Calculated and tabulated Q values disagree.
reaction label 33: n[multiplicity:'3'] + Th227 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: -12615665.30651855 eV vs -1.23623e7 eV!
243. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
244. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
245. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

246. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
247. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
248. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
249. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
250. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
251. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
252. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
253. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
254. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

255. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
256. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
257. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
258. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
259. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
260. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
261. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
262. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
263. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

264. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
265. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
266. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
267. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
268. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
269. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
270. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
271. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
272. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

273. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
274. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
275. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
276. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
277. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_r / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
278. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_r / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
279. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_s / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
280. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_s / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
281. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_t / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

282. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_t / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
283. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_u / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
284. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_u / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
285. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_v / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
286. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_v / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
287. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_w / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
288. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_w / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
289. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_x / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
290. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_x / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

291. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_y / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
292. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_y / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
293. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_z / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
294. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_z / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
295. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_aa / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
296. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_aa / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
297. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ab / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
298. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ab / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
299. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ac / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)

300. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ac / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
301. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ad / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
302. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ad / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
303. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ae / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
304. Energy range of data set does not match cross section range
reaction label 33: n[multiplicity:'3'] + Th227 + gamma / Product: gamma_ae / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (13000000.0 -> 20000000.0) vs (12416700.0 -> 20000000.0)
305. Calculated and tabulated Q values disagree.
reaction label 34: n[multiplicity:'4'] + Th226 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: -18077866.97888184 eV vs -1.78245e7 eV!
306. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_a / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
307. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_a / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
308. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_b / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)

309. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_b / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
310. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_c / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
311. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_c / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (18500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
312. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_d / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
313. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_d / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
314. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_e / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
315. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_e / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
316. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_f / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
317. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_f / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)

318. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_g / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
319. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_g / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
320. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_h / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
321. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_h / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
322. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_i / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
323. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_i / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
324. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_j / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
325. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_j / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
326. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_k / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)

327. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_k / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
328. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_l / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
329. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_l / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
330. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_m / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
331. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_m / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19000000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
332. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_n / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
333. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_n / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
334. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_o / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
335. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_o / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)

336. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_p / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
337. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_p / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
338. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_q / Multiplicity: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
339. Energy range of data set does not match cross section range
reaction label 34: n[multiplicity:'4'] + Th226 + gamma / Product: gamma_q / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)
- WARNING: Domain doesn't match the cross section domain: (19500000.0 -> 20000000.0) vs (17903000.0 -> 20000000.0)
340. Calculated and tabulated Q values disagree.
reaction label 36: Th230 + gamma (Error # 0): Q mismatch
- WARNING: Calculated and tabulated Q-values disagree: 6540485.755828857 eV vs 6793860. eV!
341. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 33: n + (Th229_c -> Th229 + gamma) total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 40.64%
342. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 34: n[multiplicity:'2'] + Th228 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 100.00%
343. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 35: n[multiplicity:'3'] + Th227 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.99%
344. Multiplicity does not match sum of linked product multiplicities!
multiplicitySum label 36: n[multiplicity:'4'] + Th226 + gamma total gamma multiplicity (Error # 0): summedMultiplicityMismatch
- WARNING: Multiplicity does not match sum of linked product multiplicities! Max diff: 99.98%

345. Calculated and tabulated Q values disagree.
fissionComponent label 0: /reactionSuite/fissionComponents/fissionComponent[@label='0']
(Error # 0): Q mismatch
- ```
WARNING: Calculated and tabulated Q-values disagree: 214281035270.4813 eV vs 1.83811e8 eV!
```
346. Calculated and tabulated Q values disagree.  
*fissionComponent label 1: /reactionSuite/fissionComponents/fissionComponent[@label='1']*  
*(Error # 0): Q mismatch*
- ```
WARNING: Calculated and tabulated Q-values disagree: 214281035270.4813 eV vs 1.83811e8 eV!
```
347. Calculated and tabulated Q values disagree.
fissionComponent label 2: /reactionSuite/fissionComponents/fissionComponent[@label='2']
(Error # 0): Q mismatch
- ```
WARNING: Calculated and tabulated Q-values disagree: 214281035270.4813 eV vs 1.83811e8 eV!
```
348. Calculated and tabulated Q values disagree.  
*fissionComponent label 3: /reactionSuite/fissionComponents/fissionComponent[@label='3']*  
*(Error # 0): Q mismatch*
- ```
WARNING: Calculated and tabulated Q-values disagree: 214281035270.4813 eV vs 1.83811e8 eV!
```
349. A covariance matrix was not positive semi-definite, so it has negative eigenvalues.
Section 42 (n + Th229 [angular distribution]): / Form 'eval': / LegendreLValue L=1 vs 1 (Error # 0): Bad evs

WARNING: 11 negative eigenvalues! Worst case = -2.744283e-04

- njoy2012 Warnings:

1. In some evaluations, the partial fission reactions MT=19, 20, 21, and 38 are given in File 3, but no corresponding distributions are given. In these cases, it is assumed that MT=18 should be used for the fission neutron distributions.
heatr...prompt kerma (0): HEATR/hinit (3)

```
---message from hinit---mt19 has no spectrum
mt18 spectrum will be used.
```

2. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (1): HEATR/hinit (4)

```
---message from hinit---mf6, mt 16 does not give recoil za= 90228
one-particle recoil approx. used.
```

3. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (2): HEATR/hinit (4)

```
---message from hinit---mf6, mt 17 does not give recoil za= 90227
one-particle recoil approx. used.
```

4. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (3): HEATR/hinit (4)

```
---message from hinit---mf6, mt 37 does not give recoil za= 90226
one-particle recoil approx. used.
```

5. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (4): HEATR/hinit (4)

```
---message from hinit---mf6, mt 51 does not give recoil za= 90229
one-particle recoil approx. used.
```

6. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (5): HEATR/hinit (4)

```
---message from hinit---mf6, mt 52 does not give recoil za= 90229
one-particle recoil approx. used.
```

7. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (6): HEATR/hinit (4)

```
---message from hinit---mf6, mt 53 does not give recoil za= 90229
one-particle recoil approx. used.
```

8. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (7): HEATR/hinit (4)

```
---message from hinit---mf6, mt 54 does not give recoil za= 90229
one-particle recoil approx. used.
```

9. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (8): HEATR/hinit (4)

```
---message from hinit---mf6, mt 55 does not give recoil za= 90229
one-particle recoil approx. used.
```

10. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (9): HEATR/hinit (4)

```
---message from hinit---mf6, mt 56 does not give recoil za= 90229
one-particle recoil approx. used.
```

11. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (10): HEATR/hinit (4)

```
---message from hinit---mf6, mt 57 does not give recoil za= 90229
one-particle recoil approx. used.
```

12. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (11): HEATR/hinit (4)

```
---message from hinit---mf6, mt 58 does not give recoil za= 90229
one-particle recoil approx. used.
```

13. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (12): HEATR/hinit (4)

```
---message from hinit---mf6, mt 59 does not give recoil za= 90229
one-particle recoil approx. used.
```

14. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (13): HEATR/hinit (4)

---message from hinit---mf6, mt 60 does not give recoil za= 90229
one-particle recoil approx. used.

15. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (14): HEATR/hinit (4)

---message from hinit---mf6, mt 61 does not give recoil za= 90229
one-particle recoil approx. used.

16. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (15): HEATR/hinit (4)

---message from hinit---mf6, mt 62 does not give recoil za= 90229
one-particle recoil approx. used.

17. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (16): HEATR/hinit (4)

---message from hinit---mf6, mt 63 does not give recoil za= 90229
one-particle recoil approx. used.

18. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (17): HEATR/hinit (4)

---message from hinit---mf6, mt 64 does not give recoil za= 90229
one-particle recoil approx. used.

19. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (18): HEATR/hinit (4)

---message from hinit---mf6, mt 65 does not give recoil za= 90229
one-particle recoil approx. used.

20. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (19): HEATR/hinit (4)

---message from hinit---mf6, mt 66 does not give recoil za= 90229
one-particle recoil approx. used.

21. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (20): HEATR/hinit (4)

---message from hinit---mf6, mt 67 does not give recoil za= 90229
one-particle recoil approx. used.

22. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (21): HEATR/hinit (4)

---message from hinit---mf6, mt 68 does not give recoil za= 90229
one-particle recoil approx. used.

23. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (22): HEATR/hinit (4)

---message from hinit---mf6, mt 69 does not give recoil za= 90229
one-particle recoil approx. used.

24. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (23): HEATR/hinit (4)

---message from hinit---mf6, mt 70 does not give recoil za= 90229
one-particle recoil approx. used.

25. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (24): HEATR/hinit (4)

---message from hinit---mf6, mt 71 does not give recoil za= 90229
one-particle recoil approx. used.

26. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (25): HEATR/hinit (4)

---message from hinit---mf6, mt 72 does not give recoil za= 90229
one-particle recoil approx. used.

27. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (26): HEATR/hinit (4)

---message from hinit---mf6, mt 73 does not give recoil za= 90229
one-particle recoil approx. used.

28. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (27): HEATR/hinit (4)

---message from hinit---mf6, mt 74 does not give recoil za= 90229
one-particle recoil approx. used.

29. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (28): HEATR/hinit (4)

---message from hinit---mf6, mt 75 does not give recoil za= 90229
one-particle recoil approx. used.

30. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (29): HEATR/hinit (4)

---message from hinit---mf6, mt 76 does not give recoil za= 90229
one-particle recoil approx. used.

31. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (30): HEATR/hinit (4)

---message from hinit---mf6, mt 77 does not give recoil za= 90229
one-particle recoil approx. used.

32. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (31): HEATR/hinit (4)

---message from hinit---mf6, mt 78 does not give recoil za= 90229
one-particle recoil approx. used.

33. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (32): HEATR/hinit (4)

```
---message from hinit---mf6, mt 79 does not give recoil za= 90229
one-particle recoil approx. used.
```

34. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (33): HEATR/hinit (4)

```
---message from hinit---mf6, mt 80 does not give recoil za= 90229
one-particle recoil approx. used.
```

35. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (34): HEATR/hinit (4)

```
---message from hinit---mf6, mt 91 does not give recoil za= 90229
one-particle recoil approx. used.
```

36. Recoil is not given, so one-particle recoil approximation used.
heatr...prompt kerma (35): HEATR/hinit (4)

```
---message from hinit---mf6, mt102 does not give recoil za= 90230
photon momentum recoil used.
```

37. There is a problem with the fission energy release.
heatr...prompt kerma (46): HEATR/nheat (3)

```
---message from nheat---changed q from 1.838110E+08 to 1.722740E+08
for mt 18
```